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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/751,638      | 01/06/2004  | Douglas Joseph Flynn | 54306.000181        | 3102             |

7590 09/17/2004

ATTN: CHRISTOPHER C. CAMPBELL  
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WASHINGTON, DC 20006

EXAMINER

NGUYEN, DINH Q

ART UNIT PAPER NUMBER

3752

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/751,638

Applicant(s)

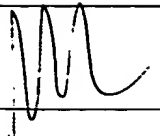
FLYNN ET AL.

Examiner

Dinh Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/06/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1, 10, 30, and 40 are objected to because of the following informalities:

- Claim 1:

In line 1, "A nozzle for providing nitrous oxide " should read -- A nitrous oxide nozzle for providing nitrous oxide --.

In line 4, "for passing fuel" should read --passing fuel--.

In line 5, "for passing nitrous oxide" should read --passing a nitrous oxide supply--.

- Claim 10, line 2, "for passing nitrous oxide" should read --passing a nitrous oxide supply--.

- Claim 30:

In line 1, "A nozzle for providing" should read --A nozzle providing--.

In line 4, "for passing fuel" should read --passing fuel--.

In line 6, "for passing a nitrous oxide supply" should read --passing a nitrous oxide supply--.

- Claim 40, line 2, "for passing" should read --passing--.

Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 10, 15-30, 37-40, and 44-46 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15-29, 47-64 of copending Application No. 10/286,843. Although the conflicting claims are not identical, they are not patentably distinct from each other because of common subject matter, as follows:

Claims 1 and 30 of the instant application cites a nozzle, a fuel injector passage, a first auxiliary passage, and a plurality of first auxiliary passages. Which are fully discloses in claims 15 and 47 respectively of the '843 application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadowaki et al.

The statement of intended use carries no patentable weight.

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Kadowaki et al. discloses a nozzle comprising a fuel injector passage 621/622, and a plurality of first auxiliary passages 624, 625 (could be adapted for passing nitrous oxide) that located in an annular pattern around the central axis (see figure 2).

6. Claims 1-4, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffer et al.

The statement of intended use carries no patentable weight.

Hoffer et al. discloses a nozzle comprising a fuel injector passage 150, and a plurality of first auxiliary passages 254-268 (could be adapted for passing nitrous oxide) that located in an annular pattern around the central axis (see figures 2 and 3).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-8, 11-14, 31-36, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Application No. 10/286,843, or Kadowaki et al., or Hoffer et al.

9. Application No. 10/286,843, or Kadowaki et al., or Hoffer et al. teaches all the limitations of the claims except for varying dimensions of the fuel injector passage, or the first auxiliary passages, or the second auxiliary passages. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to configure the nozzle of the '843 application, Kadowaki et al., or Hoffer et al. with the claimed dimensions for the injector passage or the first auxiliary passages, or the

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second auxiliary passages, because Applicant has not disclosed that the dimensions provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the '843 application, the Kadowaki et al., or the Hoffer et al. nozzle because all perform the same purpose of passing either fuel or combustion reactant therethrough. Therefore, it would have been an obvious matter of design choice to modify the nozzle of the '843 application, the Kadowaki et al., or the Hoffer et al. to obtain the invention as specified in claims 5-8, 11-14, 31-36, and 41-43.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to show the art with respect to a fuel injector: Harris, Rand, Jr., Vosper, and Kaku et al.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248 (until November 21, 2004). The examiner can normally be reached on Monday-Thursday from 6:30 AM to 5:00 PM. Effective on November 22, 2004, the telephone number will be (571) 272-4907 and the fax number will be (571) 273-4907.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on 703-308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dinh Q Nguyen', with a long horizontal flourish extending to the right.

Dinh Q Nguyen  
Primary Examiner  
Art Unit 3752

dqn